

CURRICULUM VITAE

Scopus ID: **57359357000**

Web of Science, Researcher ID: **JCO-4107-2023**

ORCID ID: **0000-0003-2094-8483**

AFFILIATION TO SCIENTIFIC SOCIETIES

- Società italiana di Farmacologia (SIF)
- European Behavioural Pharmacology Society (EBPS)

EDUCATION and TRAINING

2020-2024

- PhD student in Chemical and Pharmaceutical Sciences and Biotechnology (XXXVI cycle), Pharmacology Unit, University of Camerino, Supervisor: Professor Carlo Cifani
Scientific collaboration with the laboratories of Professor Massimo Collino and Professor Carola Eva at the Department of Neuroscience, University of Turin
Scientific collaboration with the laboratory of Professor Matthias Blüher at "Helmholtz Institute for Metabolic, Obesity and Vascular Research" in Leipzig, Germany

2014-2020

- Master's degree in Chemistry and Pharmaceutical Technologies with Top Grade (110/110 e lode) Department of Drug Science and Technology, University of Turin
Thesis title: "Effects of Meds-23, a novel inhibitor of the canonical NF-kB pathway in an in-vivo model of stroke. Supervisors: Abed N. Azab" (Ben Gurion University of the Negev, Israel), Massimo Collino (University of Turin)

01.2019 -07.2019

- Research for master thesis abroad at the Department of Clinical Biochemistry and Pharmacology at the Ben-Gurion University, Beer-Sheva, Israel (P.I. Abed N. Azab)

2014

- Graduation as Chemical Expert Technical Institute "Mario Delpozzo" – Cuneo

PUBLICATIONS *in extenso*

Metrics:

6 Articles Published in Scientific Journals

1 Article currently under peer review

H-Index (Web of Science): 4

Sum of Times Cited: 25

1. Eleonora Aimaretti, Elisa Porchietto, Giacomo Mantegazza, Giorgio Gargari, Debora Collotta, Giacomo Einaudi, Gustavo Ferreira Alves, Enrica Marzani, Alessandro Algeri, Federica Dal Bello, Manuela Aragno, Carlo Cifani, Simone Guglielmetti, Raffaella Mastrocola, Massimo Collino. **Anti-Glycation Properties of Zinc-Enriched *Arthrospira platensis* (Spirulina) Contribute to Prevention of Metaflammation in a Diet-Induced Obese Mouse Model.** *Nutrients* 2024, 16, 552 doi: 10.3390/nu16040552
 2. Mariangela Pucci, Claudio D'Addario, Emanuela Micioni Di Bonaventura, Francesca Mercante, Eugenia Annunzi, Federico Fanti, Manuel Sergi, Luca Botticelli, Giacomo Einaudi, Carlo Cifani, Maria Vittoria Micioni Di Bonaventura. **Endocannabinoid System Regulation in Female Rats with Recurrent Episodes of Binge Eating.** *International Journal of Molecular Sciences*. 2022 Dec 3;23(23):15228. doi: 10.3390/ijms232315228
 3. Gustavo Ferreira Alves, Ian Stoppa, Eleonora Aimaretti, Chiara Monge, Raffaella Mastrocola, Elisa Porchietto, Giacomo Einaudi, Debora Collotta, Ilaria Bertocchi, Elena Boggio, Casimiro Luca Gigliotti, Nausicaa Clemente, Manuela Aragno, Daniel Fernandes, Carlo Cifani, Christoph Thiemermann, Chiara Dianzani, Umberto Dianzani and Massimo Collino. **ICOS-Fc as innovative immunomodulatory approach to counteract inflammation and organ injury in sepsis.** *Frontiers in Immunology*. 2022; 13:992614. 2022, doi:10.3389/fimmu.2022.992614
 4. Gustavo Alves, Eleonora Aimaretti, Giacomo Einaudi, Raffaella Mastrocola, Junior Garcia De Oliveira, Debora Collotta, Elisa Porchietto, Manuela Aragno, Carlo Cifani, Regina Sordi, Christoph Thiemermann, Daniel Fernandes, Massimo Collino. **Pharmacological inhibition of FAK-Pyk2 pathway protects against organ damage and prolongs the survival of septic mice.** *Frontiers in Immunology*. 2022; 13:837180. 2022. doi:10.3389/fimmu.2022.837180
 5. Eleonora Aimaretti, Francesco Felicetti, Federica Dal Bello, Filippo Gatti, Alessandro Godono, Francesca Saba, Giacomo Einaudi, Massimo Collino, Franca Fagioli, Manuela Aragno, Enrico Brignardello. **Advanced glycation end products and their related signalling cascades in adult survivors of childhood Hodgkin lymphoma: A possible role in the onset of late complications.** *Free Radical Biology and Medicine*. 178:76-82 2022;. doi:10.1016/j.freeradbiomed.2021.11.036
 6. Elina Rubin, Agnese C. Pippione, Matthew Boyko, Giacomo Einaudi, Stefano Sainas, Massimo Collino, Carlo Cifani, Marco L. Lolli, Naim Abu-Freha, Jacob Kaplanski, Donatella Boschi, Abed N Azab. **A New NF- κ B Inhibitor, MEDS-23, Reduces the Severity of Adverse Post-Ischemic Stroke Outcomes in Rats.** *Brain Sciences*. Dec 28;12(1):35 2021. doi: 10.3390/brainsci12010035
- **Under review, Manuscript ID: DB22-0275.R1**
Gareth S. D. Purvis, Massimo Collino, Andrea D. van Dam, Giacomo Einaudi, Yujung Ng, Mayooran Shanmuganathan, Smita Y. Patel, Christoph Thiemermann, Keith M. Channon, David R. Greaves **OxPhos in adipose tissue macrophages regulated by BTK enhances their M2-like phenotype and confers a systemic immunometabolic benefit in obesity** *Diabetes* 2024 Jan 8;db220275. doi: 10.2337/db22-0275

PROCEEDINGS

Metrics:

9 Published Proceeding in scientific journals (Conference abstracts) presented as posters or oral communication in scientific events (Conferences/Congresses/Symposia).

- Gustavo Ferreira Alves, Ian Stoppa, Eleonora Aimaretti, Chiara Monge, Carlo Murzio, Raffaella Mastrocola, Elisa Porchietto, Giacomo Einaudi, Debora Collotta, Ilaria Bertocchi, Elena Boggio, Casimiro Luca Gigliotti, Nausicaa Clemente, Manuela Aragno, Daniel Fernandes, Christoph Thiemermann, Carlo Cifani, Chiara Dianzani, Umberto Dianzani, Massimo Collino. **ICOS-Fc as innovative immunomodulatory approach to counteract inflammation and organ injury in sepsis.** *Pharmadvances. Volume 5, special issue 2023, Conference Abstract (41st SIF National Congress), page 241. DOI: 10.36118/pharmadvances.2023.50*
- Gustavo Ferreira Alves, Eleonora Aimaretti, Giacomo Einaudi, Raffaella Mastrocola, Junior Garcia de Oliveira, Debora Collotta, Elisa Porchietto, Manuela Aragno, Carlo Cifani, Regina Sordi, Christoph Thiemermann, Daniel Fernandes, Massimo Collino. **Hyper-Inflammation and survival of septic mice are improved through pharmacological inhibition of the Fak-Pyk2 Axis.** *Pharmadvances. Volume 4, special issue, 2022, Conference Abstract (15th World Congress on Inflammation), page 14. DOI: 10.36118/pharmadvances.2022.38*
- Carlo Murzio, Gustavo Ferreira Alves, Fabio Penna, Eleonora Aimaretti, Giacomo Einaudi, Debora Collotta, Elisa Porchietto, Manuela Aragno, Carlo Cifani, Massimo Collino. **Bet Inhibitor JQ1 counteracts Hyperinflammatory Response and protects septic mice from organ damage.** *Pharmadvances. Volume 4, special issue, 2022, Conference Abstract (15th World Congress on Inflammation), page 28. DOI: 10.36118/pharmadvances.2022.38*
- Elisa Porchietto, Claudia Fornelli, Raffaella Mastrocola, Gustavo Ferreira Alves, Eleonora Aimaretti, Giacomo Einaudi, Carlo Murzio, Debora Collotta, Manuela Aragno, Carlo Cifani, Fabio Penna, Massimo Collino. **An in vivo study on the effects of BRD4 pharmacological targeting against diet-induced metaflammation.** *Pharmadvances. Volume 4, special issue, 2022, Conference Abstract (15th World Congress on Inflammation), page 29. DOI: 10.36118/pharmadvances.2022.38*
- Eleonora Aimaretti, Francesco Felicetti, Federica Dal Bello, Filippo Gatti, Maurizio Cassader, Giacomo Einaudi, Franca Fagioli, Manuela Aragno, Massimo Collino, Enrico Brignardello. **Role of advanced glycation end products in evoking systemic chronic inflammation in adult hodgkin lymphoma survivors.** *Pharmadvances. Volume 4, special issue, 2022, Conference Abstract (15th World Congress on Inflammation), page 6. DOI: 10.36118/pharmadvances.2022.38*
- Eleonora Aimaretti, Carlo Murzio, Gustavo Ferreira Alves, Giacomo Einaudi, Debora Collotta, Elisa Porchietto, Carlo Cifani, Alessandro Algeri, Manuela Aragno, Massimo Collino, Raffaella Mastrocola. **Anti-inflammatory and anti-glycative properties of zinc-enriched spirulina in diet-induced obese/diabetic mice.** *Free Radical Biology and Medicine. Volume 192, 2022, Meeting Abstract. DOI: 10.1016/j.freeradbiomed.2022.10.152*
- Gustavo Ferreira Alves, Eleonora Aimaretti, Giacomo Einaudi, Raffaella Mastrocola, Junior Garcia de Oliveira, Debora Collotta, Manuela Aragno, Christoph Thiemermann, Daniel Fernandes, Massimo Collino. **Inhibition of Fak-Pyk2 Pathway protects against organ damage and prolongs the survival of septic mice.** *Volume 3, special issue 2021, Conference Abstract (Immunopharmacology Meeting - SIF), page 18. DOI: 10.36118/pharmadvances.2021.17*
- Eleonora Aimaretti, Francesco Felicetti, Federica Dal Bello, Filippo Gatti, Maurizio Cassader, Giacomo Einaudi, Carlo Cifani, Franca Fagioli, Manuela Aragno, Massimo Collino, Enrico Brignardello. **The**

systemic inflammatory response in Hodgkin lymphoma survivors: a role for advanced glycation end products. *Volume 3, special issue 2021, Conference Abstract (Immunopharmacology Meeting - SIF), page 16. DOI: 10.36118/pharmadvances.2021.17*

- Giacomo Einaudi, Gustavo Ferreira Alves, Debora Collotta, Raffaella Mastrocola, Fabio Penna, Claudia Fornelli, Eleonora Aimaretti, Manuela Aragno, Massimo Bertinaria, Carlo Cifani, Massimo Collino. **Pharmacological targeting of cyclooxygenase to counteract metaflammation in an in vivo model of diet-induced metabolic derangements.** *Volume 3, special issue 2021, Conference Abstract (Immunopharmacology Meeting - SIF), page 16. DOI: 10.36118/pharmadvances.2021.17*

ORAL COMMUNICATION and POSTERS PRESENTED IN CONGRESSES

Metrics:

5 Congresses

1 National meeting

1 Summer/Winter schools

5 Poster presentations

1 Oral communications

- **07. 2023 – Glasgow, United Kingdom**
19th World Congress of Basic and Clinical Pharmacology (WCP2023)
Poster presentation: Giacomo Einaudi, Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Raffaella Mastrocola, Chiara Rubeo, Debora Collotta, Carlo Cifani, Manuela Aragno, Massimo Collino. **The potential role of Zn-Spirulina Platensis in counteracting advanced glycation end products harmful effects in a murine model of metabolic derangement.**
- **11.2022 – Rome, Italy**
41° CONGRESSO SIF (SOCIETA' ITALIANA DI FARMACOLOGIA)
Oral communication (XXIV SIF Seminar on Pharmacology for PhD Students, Fellows, Post Doc and Specialist Trainees): Giacomo Einaudi, Gustavo Ferreira Alves, Eleonora Aimaretti, Debora Collotta, Elisa Porchietto, Raffaella Mastrocola, Claudia Fornelli, Carlo Cifani, Manuela Aragno, Fabio Penna, Massimo Bertinaria, Massimo Collino. **Anti-inflammatory treatment with etodolac restores local insulin signalling and hormonal profile in a mice model of diet-induced metabolic derangements.**
- **06.2022 - Rome, Italy**
15th World Congress on Inflammation. New frontiers in inflammation: from translational research to clinic.
Poster presentation: Giacomo Einaudi, Gustavo Ferreira Alves, Debora Collotta, Massimo Bertinaria, Eleonora Aimaretti, Claudia Fornelli, Raffaella Mastrocola, Carlo Cifani, Manuela Aragno, Fabio Penna, Massimo Collino. **Beneficial effects of the pharmacological modulation of metaflammation by etodolac in an in-vivo model of diet-induced metabolic derangements**
- **11.2021 - Perugia, Italy**
I meeting monotematico di Immunofarmacologia
Poster presentation: Giacomo Einaudi, Gustavo Ferreira Alves, Debora Collotta, Raffaella Mastrocola, Fabio Penna, Claudia Fornelli, Eleonora Aimaretti, Manuela Aragno, Massimo Bertinaria, Carlo Cifani, Massimo Collino. **Pharmacological targeting of cyclooxygenase to counteract metaflammation in an in vivo model of diet-induced metabolic derangements.**
- **07.2021 – Online congress**
European Behavioural Pharmacology Society Biennial Meeting 2021

Poster presentation: Elina Rubin, Agnese C. Pippione, Matthew Boyko, Giacomo Einaudi, Stefano Sainas, Massimo Collino, Marco L. Lolli, Carlo Cifani, Jacob Kaplanski, Abed N Azab. **Inhibition of the canonical NF κ B cascade reduces morbidity in a rat model of stroke but does not prevent the onset of behavioral disorders**

- **05. 2021 – Padova, Italy (virtually)**
International Summer School in Microbiota, Immunity, and Neurons: Decoding functional and molecular host–microbiota communication IN the GUT – MINDinGUT – (16 h).
- **03.2021 – Online congress**
40° CONGRESSO SIF (SOCIETÀ ITALIANA DI FARMACOLOGIA)
Poster presentation: Gustavo Ferreira Alves, Debora Collotta, Barbara Mulè, Francesca Baratta, Daniele Zonari, Carlo Cifani, Giacomo Einaudi, Sigal Fleisher-Berkovich, Shimon Ben-Shabat, Paola Brusa, Massimo Collino **Effects of cannabidiol and angiotensin-II receptor antagonists on LPS-induced neuroinflammatory responses in BV2 microglial cells**

CO-AUTHORSHIP IN CONFERENCE ABSTRACTS

Metrics:

16 Co-authorship in Conference abstracts presented as posters or oral communication in scientific events (Conferences/Congresses/Symposia).

- Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Giacomo Einaudi, Debora Collotta, Raffaella Mastrocola, Carlo Cifani, Manuela Aragno, Massimo Collino. An in vivo study on the potential repurposing of fostamatinib as effective pharmacological strategy for diet-induced metabolic derangements”, SIF monothematic meeting “Le basi molecolari della farmacologia in ambito cardiometabolico: cross talk tra cuore, vasi e metabolismo”. Parma, 2023
- Gustavo Ferreira Alves, Eleonora Aimaretti, Maria Luísa da Silveira Hahmeyer, Giacomo Einaudi, Elisa Porchietto, Chiara Rubeo, Debora Collotta, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, José Eduardo da Silva-Santos, Daniel Fernandes, Massimo Collino. Pharmacological inhibition of CK2 attenuates sepsis-induced cardiovascular dysfunction by reducing NO release. SIF monothematic meeting “Le basi molecolari della farmacologia in ambito cardiometabolico: cross talk tra cuore, vasi e metabolismo”. Parma, 2023
- Gustavo Ferreira Alves, Ian Stoppa, Eleonora Aimaretti, Chiara Monge, Raffaella Mastrocola, Elisa Porchietto, Giacomo Einaudi, Debora Collotta, Bertocchi Ilaria, Elena Boggio, Casimiro Luca Gigliotti, Nausicaa Clemente, Manuela Aragno, Daniel Fernandes, Christoph Thiemermann, Carlo Cifani, Chiara Dianzani, Umberto Dianzani, Massimo Collino. Immune checkpoint modulation with ICOS-Fc attenuates inflammation and multiple organ failure in murine sepsis. SIF monothematic meeting “From phagocytosis discovery to today: new insights on inflammation”, Messina, 2023
- Elisa Porchietto, Eleonora Aimaretti, Gustavo Ferreira Alves, Giacomo Einaudi, Debora Collotta, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, Massimo Collino. Casein Kinase II as pharmacological target for counteracting diet-induced metabolic inflammation in mice. *XXV Conference of Young Sif Pharmacologists, Urbino, 2023*
- Gustavo Ferreira Alves, Eleonora Aimaretti, Maria Luísa da Silveira Hahmeyer, Giacomo Einaudi, Elisa Porchietto, Chiara Rubeo, Debora Collotta, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, José Eduardo da Silva-Santos, Daniel Fernandes, Massimo Collino. Pharmacological inhibition of casein kinase-2 with silmitasertib attenuates sepsis-induced cardiovascular dysfunction, thus prolonging the survival of septic mice. *XXV Conference of Young Sif Pharmacologists, Urbino, 2023*

- Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Giacomo Einaudi, Debora Collotta, Raffaella Mastrocola, Carlo Cifani, Manuela Aragno, Massimo Collino. Spleen tyrosine kinase as innovative pharmacological target for counteracting diet-induced metabolic derangements in mice. *XXV Conference of Young Sif Pharmacologists, Urbino, 2023*
- Gustavo Ferreira Alves, Eleonora Aimaretti, Maria Luísa da Silveira Hahmeyer, Giacomo Einaudi, Elisa Porchietto, Debora Collotta, Chiara Rubeo, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, José Eduardo da Silva-Santos, Daniel Fernandes, Massimo Collino. **Silmitasertib protects against cardiovascular dysfunction and reduces mortality of septic mice.** *19th World Congress of Basic and Clinical Pharmacology, Glasgow, 2023.*
- Elisa Porchietto, Eleonora Aimaretti, Gustavo Ferreira Alves, Giacomo Einaudi, Chiara Rubeo Debora Collotta, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, Massimo Collino. **4,5,6,7-tetrabromobenzotriazole (TBB) counteracts metabolic derangements evoked by the consumption of hypercaloric diet in mice.** *19th World Congress of Basic and Clinical Pharmacology, Glasgow, 2023.*
- Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Giacomo Einaudi, Debora Collotta, Chiara Rubeo, Raffaella Mastrocola, Carlo Cifani, Manuela Aragno, Massimo Collino. **Potential repurposing of Fostamatinib in diet-induced metabolic disease: an *in vivo* study.** *19th World Congress of Basic and Clinical Pharmacology, Glasgow, 2023.*
- Francesco Felicetti, Eleonora Aimaretti, Federica Dal Bello, Filippo Gatti, Alessandro Godono, Francesca Saba, Giacomo Einaudi, Massimo Collino, Franca Fagioli, Manuela Aragno, Enrico Brignardello. **Advanced glycation end products and their related signalling cascades in adult survivors of childhood Hodgkin lymphoma: A possible role in the onset of late complications.** *27th PanCare Meeting. Turin, 2022*
- Gustavo Ferreira Alves Gustavo, Eleonora Aimaretti, Maria Luisa da Silveira Hahmeyer, Giacomo Einaudi, Elisa Porchietto, Chiara Rubeo, Debora Collotta, Carlo Murzio, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, Jose-Eduardo da Silva-Santos, Daniel Fernandes, Massimo Collino. **Casein Kinase 2 as a new pharmacological target to counteract cardiovascular dysfunction and mortality evoked by sepsis in mice.** *41° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Rome, 2022.*
- Elisa Porchietto, Eleonora Aimaretti, Gustavo Ferreira Alves, Carlo Murzio, Giacomo Einaudi, Debora Collotta, Chiara Rubeo, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, Massimo Collino. **Pharmacological inhibition of Casein Kinase 2 (CK2) protects against diet-induced metabolic derangements in mice.** *41° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Rome, 2022.*
- Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Carlo Murzio, Debora Collotta, Chiara Rubeo, Giacomo Einaudi, Raffaella Mastrocola, Carlo Cifani, Manuela Aragno, Massimo Collino. **Potential repurposing of fostamatinib in diet-induced metabolic disease: an *in vivo* study.** *41° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Rome, 2022.*
- Eleonora Aimaretti, Elisa Porchietto, Gustavo Ferreira Alves, Raffaella Mastrocola, Alessandro Algeri, Chiara Rubeo, Giacomo Einaudi, Debora Collotta, Carlo Cifani, Manuela Aragno and Massimo Collino. **The potential role of a novel nutraceutical approach in counteracting Advanced Glycation End products harmful effects in a murine model of metabolic derangement.** *41° Congresso Nazionale della Società Italiana di Farmacologia (SIF), Rome, 2022.*

- Eleonora Aimaretti, Francesco Felicetti, Federica Dal Bello, Filippo Gatti, Maurizio Cassader, Giacomo Einaudi, Franca Fagioli, Manuela Aragno, Massimo Collino, Enrico Brignardello. **Role of advanced glycation end products (AGEs) in evoking systemic chronic inflammation in adult Hodgkin lymphoma survivors.** *15th World Congress on Inflammation (WCI), Rome, 2022.*
- Chiara Rubeo, Gustavo Ferreira Alves, Eleonora Aimaretti, Maria Luisa Hahmeyer da Silveira, Giacomo Einaudi, Elisa Porchietto, Debora Collotta, Carlo Murzio, Raffaella Mastrocola, Manuela Aragno, Carlo Cifani, Jose-Eduardo Da Silva-Santos, Daniela Fernandes, Massimo Collino. **Casein Kinase 2 as new pharmacological target to counteract cardiovascular dysfunction and mortality evoked by sepsis in mice.** *15th World Congress on Inflammation (WCI), Rome, 2022.*

LABORATORY SKILLS

In vivo experiments

Manipulation of rodents: handling of both mice and rats, drug administration, oral gavage, evaluation of animal's metabolic profile (oGTT and ipGTT, ITT), use of metabolic cages, collection of blood and different organs/tissues (liver, kidneys, heart, gastrocnemius muscle, small intestine, fat pads, spleen, lungs) also after reperfusion of tissues. Performance of behavioral and locomotor tests on laboratory animals (open field, T maze, Elevated Plus Maze, CAR, Morris Water Maze, Rotarod). Basic knowledge of several invasive procedures: middle cerebral artery occlusion, cecal ligation and puncture, intrathecal administration.

Molecular Biology

Immunohistochemistry and immunofluorescence, Western blotting, DNA-RNA-protein extraction from tissue and cells, qRT-PCR, ELISA, UV-Vis spectrophotometry, enzymatic assays, use of optical, fluorescence and confocal microscopy, image analysis.

Statistical analysis

Performance and rigorous analysis of data sets with GraphPad prism and R.

Software

Advance proficiency of Office (Excel, Word, Power Point, Publisher), GraphPad Prism, ImageLab and Ethovision.

Additional professional skills

Supervision of master's students in practical and theoretical thesis writing; adaptability to work alone and in a group developed through several experiences in different laboratories in Italy and abroad.

ADDITIONAL INFORMATION

- Professional qualification to practice as a professional pharmacist (2020)

CERTIFICATES

- Authorisation to conduct experiments on rabbits and rodents - Ben Gurion University of the Negev
Authorization number: **BGU-S-1088-2019**
- IZSLER Certificates recognized by the Italian Ministry of Health
 - Legislazione nazionale ed etica livello 1
 - Biologia e gestione degli animali da laboratorio
 - Etica e concezione dei progetti